

REMARKS

Reconsideration of this application is respectfully requested in view of the amendments and arguments presented herein. Claims 1-61 remain pending in the present application. Claims 1, 9, 11, 12, 18, 20, 21, and 38-47 have been amended. No new matter has been added. Applicant understands the previous rejections under 35 U.S.C. 112, first paragraph have been overcome.

Specification

The present Office Action states that the Specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. Applicant has amended the Specification herein and respectfully asserts that no new matter has been added. Accordingly, Applicant respectfully asserts that the objections have been overcome and respectfully requests the objections to the Specification be withdrawn.

35 U.S.C. Section 112 Rejections

The present Office Action rejects Claims 1-61 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. As per Claims 1, 15, 18, 20, 21, and 38, Applicant has and Claims 1, 11, 18, 20, 21, and 38-47 herein. As per Claim 12, Applicant directs the Examiner to page 19, lines 19-21 of the Specification and describes a time manager in accordance with an embodiment of the invention.

Dependent Claims overcome the rejections by virtue of their dependency. Accordingly, Applicant respectfully asserts that 35 U.S.C. 112, second paragraph, rejections are overcome.

35 U.S.C. Section 103(a) Rejections

The present Office Action rejects independent Claim 21 as being unpatentable over US Patent No. 5,202,987 (hereinafter Bayer) in view of US Patent No. 5,504,670 (hereinafter Barth), and in view of US Patent No. 6,496,880 (hereinafter Ma). Applicant respectfully traverses.

Applicant directs the Examiner to independent Claim 21 which recites (emphasis added):

A multicore processor comprising:
a plurality of interconnected processor elements, at least one of which is a master processing unit, each element providing resources for processing executable transactions, and wherein said plurality of interconnected processor elements are integrated into a single integrated circuit die;
a resource management and task allocation controller, in communication with each of the processor elements but separate from the master processing unit, and comprising control logic for allocating executable transactions within the multicore processor to a one of the processor elements in accordance with one of a range of pre-defined allocation parameters; and
a plurality of controller clients, at least one of which is associated with a corresponding one of the plurality of interconnected processor elements, wherein each controller client is configured to control communications between its said associated processing element and the rest of the multicore processor, dependent upon control signals from the task allocation controller.

Claims 1 and 38 recite distinguishing limitations similar to those of Claim 1.

The rejection admits that Bayer does not specifically disclose a plurality of controller clients, at least one of which is associated with a corresponding one of the

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plurality of interconnected processor elements, wherein each controller client is configured to control communication between its associated processing element and the rest of the multicore processor, dependent upon control signals from the task allocation controller. The Response to Arguments section alleges that Barth teaches a plurality of processing elements having associated sub-controller and each sub-controller is configured to control communication between its associated processing elements. Applicant respectfully disagrees. The rejection further alleges that Barth teaches a plurality of controller clients, at least one of which is associated with a corresponding one of the plurality of interconnected processor elements, wherein each controller client is configured to control communications between its associated processing element and the rest of the multicore processor, dependent upon control signals from the task allocation controller. Applicant respectfully disagrees.

Applicant directs the Examiner to the cited portion of Barth that mentions (emphasis added):

Each processor is associated with a sub-controller (e.g., sub-controller 406A-409A) to facilitate the reallocation of resources. In other words, the present invention uses N independent sub-controllers in conjunction with switchable common bus 410 to allocate the site resources. In the currently preferred embodiment, N equals the number of processors in the system, such that each processor has its own sub-controller to aid in resource allocation. (Col. 5, lines 3-10)

To the extent that Barth mentions that each processor has its own sub-controller to aid in resource allocation (Col 5, lines 9-10), Applicant respectfully asserts Barth nevertheless does not teach or suggest the limitations of each controller client is configured to control communications between its associated processing element and the rest of the multicore processor, as claimed. Applicant further points out that Barth mentions a plurality of sub-controllers which allow the resources within the computer system to be allocated

among the processors (Abstract). Thus, Applicant understands the sub-controllers of Barth to be for resource allocation. Moreover, Applicant respectfully asserts that Barth is silent as to a plurality of controller clients each configured to control communication between its associated processing element and the rest of the multicore processor, as claimed.

Applicant respectfully asserts that Ma does not remedy the shortcoming of Barth and Bayer. Applicant respectfully asserts Ma is silent as to a plurality of controller clients, as claimed. Therefore, Applicant respectfully asserts that embodiments as recited by Claim 21 are not rendered obvious by the cited references within the meaning of 35 U.S.C. 103(a).

Independent Claims 1 and 38 are patentable for similar reasons as recited above. Accordingly, Applicant respectfully asserts that dependent Claims are patentable by virtue of their dependency.

CONCLUSION

Applicant respectfully asserts that all claims (Claims 1-61) are in condition for allowance and Applicant earnestly solicits such action from the Examiner. The Examiner is urged to contact Applicant's undersigned representative if the Examiner believes such action would expedite resolution of the present Application.

Please charge any additional fees or apply any credits to our PTO deposit account number: 50-4160.

Respectfully submitted,
MURABITO, HAO & BARNES

Dated: November 2, 2010

/Michael D. Sochor/
Michael D. Sochor
Registration No. 58,348

Two North Market Street
Third Floor
San Jose, CA 95113
(408) 938-9060